ABSTRACT

PREDICTING THE NEED FOR VENTILATORY SUPPORT IN ORGANOPHOSPHORUS COMPOUND POISONING

BACKGROUND AND OBJECTIVES

Organophosphorous compound poisoning frequently lead to respiratory compromise and depend on mechanical ventilation.so,the study was conducted to find out the features which support the need of ventilator support in these group of patients.

Methods

All the patients who were diagnosed to have consumed organophosphorous compound poison admitted in Chegalpattu Medical College Hospital, Chengalpattu. Who presented within 24 hours of consumption were included in the study. Patients with concomitant respiratory illness double poisonings and those treated outside were excluded from the study.

Results

A total number of 100 patients were studied. 60 were males and 40 were females.36 patients required ventilation. 100% of patients with respiratory rate > 25 breaths/ minute and 55% of patients with a fasciculation score of ≥4 required ventilation. Ventilation was required by

84.6% of patients who had a GCS score of ≤ 10. 21.7% of patients with mild and 33.3% with moderate poisoning required ventilation. In contrast 66.6% of patients with severe poisoning required ventilation. Of the patients admitted to the hospital ≥4 hours after consumption of poison, 36% required ventilation Of the 19 patients who has oxygen saturation levels ≤89%, 18(94.7%) required ventilation.36 patients with activation of accessory muscles of respiration need mechanical ventilation. During 48 hrs of inpatients administered with maximum dose of atropine on mechanical ventilation are compared with non ventilator patients.

Conclusion

Patients who presented with increased respiratory rate, accessory activation of respiratory muscle, more score of fasciculation score, GCS-score of ≤10, increased time delay between consumption of poison and admission to hospital (≥4 hours), severe grade of poisoning and O2 saturation ≤89% were more likely to require ventilation. The age , sex, pulse rate, size of the pupil , and variety of opc product were not correlated to the ventilatory support.